

Title (en)
Gas sensor

Title (de)
Gassensor

Title (fr)
Capteur de gaz

Publication
EP 0987548 A3 20040929 (EN)

Application
EP 99307395 A 19990917

Priority
JP 26310998 A 19980917

Abstract (en)
[origin: EP0987548A2] A gas sensor assumes a laminate structure composed of thin sheets of solid electrolyte and includes a cavity portion 21 and an oxygen concentration cell 5. The oxygen concentration in the cavity portion 21 is held constant. The oxygen concentration cell 5 includes an active electrode 12 having a relatively high catalytic capability with respect to NO_x or combustible gas and an inner common electrode 13/15 (serving as an inactive electrode and an oxygen-concentration-sensing electrode) having a relatively low catalytic capability with respect to NO_x or combustible gas. The oxygen concentration cell 5 is disposed so as to be exposed to the interior of the cavity portion 21. The concentration of NO_x or combustible gas is determined on the basis of an electromotive force (of the order of mV) generated between the active electrode 12 and the inner common electrode 13/15 by the concentration cell effect. <IMAGE> <IMAGE>

IPC 1-7
G01N 27/417; **G01N 27/407**; **G01N 27/419**

IPC 8 full level
G01N 27/409 (2006.01); **G01N 27/26** (2006.01); **G01N 27/416** (2006.01); **G01N 27/417** (2006.01)

CPC (source: EP US)
G01N 27/417 (2013.01 - EP US)

Citation (search report)

- [X] EP 0811839 A2 19971210 - RIKEN KK [JP]
- [X] EP 0769694 A1 19970423 - NGK INSULATORS LTD [JP]
- [A] EP 0791828 A1 19970827 - NGK INSULATORS LTD [JP]

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
EP 0987548 A2 20000322; **EP 0987548 A3 20040929**; **EP 0987548 B1 20100901**; DE 69942714 D1 20101014; JP 2000088796 A 20000331; JP 3587290 B2 20041110; US 2003070924 A1 20030417; US 6635162 B2 20031021

DOCDB simple family (application)
EP 99307395 A 19990917; DE 69942714 T 19990917; JP 26310998 A 19980917; US 39793199 A 19990917